



Eagle Eye Drone Service

Your Aerial Imaging Specialists
Member of Airborne Law Enforcement Association
Member AUVSI

Michigan Senate
Transportation Committee
Lansing , MI

SB 432 & 433 (Tie barred)

Dear Senator,

SB 432:

Eagle Eye Drone Service is writing to express our concerns regarding the proposed legislation to effectively **usurp navigable airspace** from the regulatory authority of the Federal Aviation Administration. We know supporting Michigan small business is important to you, but as drafted, your bills would not only severely inhibit the viability of small businesses, but would also expose the State of Michigan to serious legal challenges regarding the authority of the State to regulate air commerce and air navigation.

Eagle Eye Drone Service takes pride in their flight operations especially when it comes to privacy and respecting the close proximity of airspace around those who are not fully supportive of UAV operations. Coordination with interested stakeholders always improves the outcome desired.

As the FAA notes in a recent policy circular intended to clarify the delineation of authority between States and the Federal government, **Congress vested sole authority to regulate air safety and navigation with the FAA.**¹

Indeed, the FAA notes that “substantial air safety issues are raised when state or local governments attempt to regulate operation of flight of aircraft.” Further, they stress that **a single consistent regulatory system, rather than varying standards, is the only way to ensure safety of flight for both manned and unmanned aircraft.** As highly experienced manned-aircraft pilots, we concur with the FAA’s assessment that any such efforts would be confusing and duplicative for drone operators, potentially causing traffic conflicts between manned and unmanned aircraft.

Case law proves, that **“Where Congress occupies an entire field . . . even complimentary state regulation is impermissible.”** This concept has even been affirmed in aviation-specific precedent. The FAA’s policy circular, issued December 17,

¹ <https://www.faa.gov/uas/regulations-policies/media/UAS-Fact-Sheet-Final.pdf>

2015, encourages states to consult with the FAA's chief legal counsel prior to legislating on UAS issues. We hope you will do the same.

The FAA is currently in the process of finalizing a new regulatory structure for UAS operations, that are expected to be issues within the year. These new regulations will address the qualifications for those individuals wishing to fly drones, and specific restrictions on their operation. We would suggest that the State assess these final regulations when they are published, and revisit your proposals at that time.

We can't see any benefit for Michigan to usurp navigable airspace from a regulatory body like the Federal Aviation Administration and in doing so, would set a bad precedence.

SB 433

The definition outlined in SB433 is lacking the technical aspects of this new emerging field and greater clarification should be brought forward to this committee;

Current wording as outlined in SB433:

(H) "DRONE" MEANS AN AIRCRAFT, OR OTHER FLYING DEVICE, THAT IS REMOTELY CONTROLLED.

We would offer the following wording that better describes the spirit of intent:

(H) "UNMANNED AIRCRAFT" MEANS THE FLYING PORTION OF AN UNMANNED AIRCRAFT SYSTEM, FLOWN BY A PILOT VIA A GROUND CONTROL SYSTEM OR AUTONOMOUSLY THROUGH USE OF AN ONBOARD COMPUTER, A COMMUNICATION LINK, AND ANY ADDITIONAL EQUIPMENT THAT IS NECESSARY FOR THE UNMANNED AIRCRAFT TO OPERATE SAFELY.

(I) "UNMANNED AIRCRAFT SYSTEM" MEANS AN UNMANNED AIRCRAFT AND ALL THE ASSOCIATED SUPPORT EQUIPMENT, CONTROL STATIONS, DATA LINKS, TELEMETRY, COMMUNICATIONS AND NAVIGATION EQUIPMENT, AND OTHER EQUIPMENT NECESSARY TO OPERATE THE UNMANNED AIRCRAFT.

(J) "Vehicle" means any device in, on, or by which a person or property is or may be transported, except an aircraft.

We would also like to include the following to parallel FAA's guidance, since the FAA has supreme control over navigable airspace.

CHAPTER VA

REGULATION OF UNMANNED AIRCRAFT SYSTEMS

SEC. 95. (1) A UNIT OF LOCAL GOVERNMENT SHALL NOT ADOPT AN

ORDINANCE OR TAKE ANY OTHER ACTION TO PROHIBIT, RESTRICT, OR REGULATE THE TESTING OR OPERATION OF UNMANNED AIRCRAFT SYSTEMS IN THIS STATE.

(2) AS USED IN THIS SECTION, "UNIT OF LOCAL GOVERNMENT" MEANS A COUNTY, CITY, VILLAGE, OR TOWNSHIP OR ANY OTHER POLITICAL SUBDIVISION, PUBLIC CORPORATION, AUTHORITY, OR DISTRICT THAT HAS THE POWER UNDER THE LAW OF THIS STATE TO ADOPT AN ORDINANCE OR TAKE ANY OTHER ACTION TO REGULATE THE USE OF LAND WITHIN THE TERRITORY IT CONTROLS.

The above paragraph - (2) - Follows the FAA guidance outlined in the attached document titled: "State and Local Regulation of Unmanned Aircraft Systems" (UAS) Fact Sheet by the Federal Aviation Administration Office of the Chief Counsel

Congress has vested the FAA with authority to regulate the areas of airspace use, management and efficiency, air traffic control, safety, navigational facilities, and aircraft noise at its source. **49 U.S.C. §§ 40103, 44502, and 44701-44735.** Congress has directed the FAA to "develop plans and policy for the use of the navigable airspace and assign by regulation or order the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace." 49 U.S.C.

§ 40103(b)(1). Congress has further directed the FAA to "prescribe air traffic regulations on the flight of aircraft (including regulations on safe altitudes)" for navigating, protecting, and identifying aircraft; protecting individuals and property on the ground; using the navigable airspace efficiently; and preventing collision between aircraft, between aircraft and land or water vehicles, and between aircraft and airborne objects. 49 U.S.C. § 40103(b)(2).

It is our belief that SB 433 should not advance until these proposed changes are included.

Thank you for your time,

Greg MacMaster

Former 105th State Representative
Co-Owner - Eagle Eye Drone Service

Member: AUVSI, ALEA, AMS

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State and Local Regulation of Unmanned Aircraft Systems (UAS)
Fact Sheet

Federal Aviation Administration
Office of the Chief Counsel

December 17, 2015

BACKGROUND

Unmanned aircraft systems (UAS) are aircraft subject to regulation by the FAA to ensure safety of flight, and safety of people and property on the ground. States and local jurisdictions are increasingly exploring regulation of UAS or proceeding to enact legislation relating to UAS operations. In 2015, approximately 45 states have considered restrictions on UAS. In addition, public comments on the Federal Aviation Administration's (FAA) proposed rule, "Operation and Certification of Small Unmanned Aircraft Systems" (Docket No. FAA-2015-0150), expressed concern about the possible impact of state and local laws on UAS operations.

Incidents involving unauthorized and unsafe use of small, remote-controlled aircraft have risen dramatically. Pilot reports of interactions with suspected unmanned aircraft have increased from 238 sightings in all of 2014 to 780 through August of this year. During this past summer, the presence of multiple UAS in the vicinity of wild fires in the western U.S. prompted firefighters to ground their aircraft on several occasions.

This fact sheet is intended to provide basic information about the federal regulatory framework for use by states and localities when considering laws affecting UAS. State and local restrictions affecting UAS operations should be consistent with the extensive federal statutory and regulatory framework pertaining to control of the airspace, flight management and efficiency, air traffic control, aviation safety, navigational facilities, and the regulation of aircraft noise at its source.

Presented below are general principles of federal law as they relate to aviation safety, and examples of state and local laws that should be carefully considered prior to any legislative action to ensure that they are consistent with applicable federal safety regulations. The FAA's Office of the Chief Counsel is available for consultation on specific questions.

WHY THE FEDERAL FRAMEWORK

Congress has vested the FAA with authority to regulate the areas of airspace use, management and efficiency, air traffic control, safety, navigational facilities, and aircraft noise at its source. 49 U.S.C. §§ 40103, 44502, and 44701-44735. Congress has directed the FAA to "develop plans and policy for the use of the navigable airspace and assign by regulation or order the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace." 49 U.S.C. § 40103(b)(1). Congress has further directed the FAA to "prescribe air traffic regulations on the flight of aircraft (including regulations on safe altitudes)" for navigating, protecting, and identifying aircraft; protecting individuals and property on the ground; using the navigable

airspace efficiently; and preventing collision between aircraft, between aircraft and land or water vehicles, and between aircraft and airborne objects. 49 U.S.C. § 40103(b)(2).

A consistent regulatory system for aircraft and use of airspace has the broader effect of ensuring the highest level of safety for all aviation operations. To ensure the maintenance of a safe and sound air transportation system and of navigable airspace free from inconsistent restrictions, FAA has regulatory authority over matters pertaining to aviation safety.

REGULATING UAS OPERATIONS

In § 333 of the FAA Modernization and Reform Act of 2012 (Public Law No. 112-95), Congress directed the Secretary to determine whether UAS operations posing the least amount of public risk and no threat to national security could safely be operated in the national airspace system (NAS) and if so, to establish requirements for the safe operation of these systems in the NAS.

On February 15, 2015, the FAA proposed a framework of regulations that would allow routine commercial use of certain small UAS in today's aviation system, while maintaining flexibility to accommodate future technological innovations. The FAA's Notice of Proposed Rulemaking offered safety rules for small UAS (under 55 pounds) conducting non-recreational or non-hobby operations. The proposed rule defines permissible hours of flight, line-of-sight observation, altitude, operator certification, optional use of visual observers, aircraft registration and marking, and operational limits.

Consistent with its statutory authority, the FAA is requiring Federal registration of UAS in order to operate a UAS. Registering UAS will help protect public safety in the air and on the ground, aid the FAA in the enforcement of safety-related requirements for the operation of UAS, and build a culture of accountability and responsibility among users operating in U.S. airspace. No state or local UAS registration law may relieve a UAS owner or operator from complying with the Federal UAS registration requirements. Because Federal registration is the exclusive means for registering UAS for purposes of operating an aircraft in navigable airspace, no state or local government may impose an additional registration requirement on the operation of UAS in navigable airspace without first obtaining FAA approval.

Substantial air safety issues are raised when state or local governments attempt to regulate the operation or flight of aircraft. If one or two municipalities enacted ordinances regulating UAS in the navigable airspace and a significant number of municipalities followed suit, fractionalized control of the navigable airspace could result. In turn, this 'patchwork quilt' of differing restrictions could severely limit the flexibility of FAA in controlling the airspace and flight patterns, and ensuring safety and an efficient air traffic flow. A navigable airspace free from inconsistent state and local restrictions is essential to the maintenance of a safe and sound air transportation system. See *Montalvo v. Spirit Airlines*, 508 F.3d 464 (9th Cir. 2007), and *French v. Pan Am Express, Inc.*, 869 F.2d 1 (1st Cir. 1989); see also *Arizona v. U.S.*, 567 U.S. ___, 132 S.Ct. 2492, 2502 (2012) ("Where Congress occupies an entire field . . . even complimentary state regulation is impermissible. Field preemption reflects a congressional decision to foreclose any

state regulation in the area, even if it is parallel to federal standards.”), and *Morales v. Trans World Airlines, Inc.*, 504 U.S. 374, 386-87 (1992).

EXAMPLES OF STATE AND LOCAL LAWS FOR WHICH CONSULTATION WITH THE FAA IS RECOMMENDED

- Operational UAS restrictions on flight altitude, flight paths; operational bans; any regulation of the navigable airspace. For example – a city ordinance banning anyone from operating UAS within the city limits, within the airspace of the city, or within certain distances of landmarks. Federal courts strictly scrutinize state and local regulation of overflight. *City of Burbank v. Lockheed Air Terminal*, 411 U.S. 624 (1973); *Skysign International, Inc. v. City and County of Honolulu*, 276 F.3d 1109, 1117 (9th Cir. 2002); *American Airlines v. Town of Hempstead*, 398 F.2d 369 (2d Cir. 1968); *American Airlines v. City of Audubon Park*, 407 F.2d 1306 (6th Cir. 1969).
- Mandating equipment or training for UAS related to aviation safety such as geo-fencing would likely be preempted. Courts have found that state regulation pertaining to mandatory training and equipment requirements related to aviation safety is not consistent with the federal regulatory framework. *Med-Trans Corp. v. Benton*, 581 F. Supp. 2d 721, 740 (E.D.N.C. 2008); *Air Evac EMS, Inc. v. Robinson*, 486 F. Supp. 2d 713, 722 (M.D. Tenn. 2007).

EXAMPLES OF STATE AND LOCAL LAWS WITHIN STATE AND LOCAL GOVERNMENT POLICE POWER

Laws traditionally related to state and local police power – including land use, zoning, privacy, trespass, and law enforcement operations – generally are not subject to federal regulation. *Skysign International, Inc. v. City and County of Honolulu*, 276 F.3d 1109, 1115 (9th Cir. 2002). Examples include:

- Requirement for police to obtain a warrant prior to using a UAS for surveillance.
- Specifying that UAS may not be used for voyeurism.
- Prohibitions on using UAS for hunting or fishing, or to interfere with or harass an individual who is hunting or fishing.
- Prohibitions on attaching firearms or similar weapons to UAS.

CONTACT INFORMATION FOR QUESTIONS

The FAA’s Office of the Chief Counsel is available to answer questions about the principles set forth in this fact sheet and to consult with you about the intersection of federal, state, and local regulation of aviation, generally, and UAS operations, specifically. You may contact the Office of Chief Counsel in Washington, D.C. or any of the following Regional Counsels:

FAA Office of the Chief Counsel
Regulations Division (AGC-200)
800 Independence Ave. SW
Washington, DC 20591
(202) 267-3073

Alaskan Region
Office of the Regional Counsel
222 West 7th Ave.
Anchorage, AK 99513
(909) 271-5269
(AK)

Central Region
Office of the Regional Counsel
901 Locust St., Room 506
Kansas City, MO 64406-2641
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(IA, KS, MO, NE)

Eastern Region
Office of the Regional Counsel
1 Aviation Plaza, Room 561
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Great Lakes Region
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O'Hare Lake Office Center
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New England Region
Office of the Regional Counsel
12 New England Executive Park
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Northwest Mountain Region
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1601 Lind Ave. SW
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1701 Columbia Ave., Suite 530
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Southwest Region
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Western-Pacific Region
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Los Angeles, CA 90009
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(AZ, CA, HI, NV)

APPENDIX – LIST OF AUTHORITIES

Federal Statutes

- 49 U.S.C. §§ 40103, 44502, and 44701- 44735 (former Federal Aviation Act of 1958, as amended and recodified).
- FAA Modernization and Reform Act of 2012, Public Law No. 112-95 (Feb. 14, 2012), Subtitle B, “Unmanned Aircraft Systems.”

Federal Regulations

- Title 14 of the Code of Federal Regulations, Chapter 1.

The U.S. Supreme Court

- “Congress has recognized the national responsibility for regulating air commerce. Federal control is intensive and exclusive. Planes do not wander about in the sky like vagrant clouds. They move only by federal permission, subject to federal inspection, in the hands of federally certified personnel and under an intricate system of federal commands. The moment a ship taxis onto a runway it is caught up in an elaborate and detailed system of controls. It takes off only by instruction from the control tower, it travels on prescribed beams, it may be diverted from its intended landing, and it obeys signals and orders. Its privileges, rights, and protection, so far as transit is concerned, it owes to the Federal Government alone and not to any state government.” *Northwest Airlines v. State of Minnesota*, 322 U.S. 292, 303 (1944)(Jackson, R., concurring).
- “If we were to uphold the Burbank ordinance [which placed an 11 p.m. to 7 a.m. curfew on jet flights from the Burbank Airport] and a significant number of municipalities followed suit, it is obvious that fractionalized control of the timing of takeoffs and landings would severely limit the flexibility of FAA in controlling air traffic flow. The difficulties of scheduling flights to avoid congestion and the concomitant decrease in safety would be compounded.” *Burbank v. Lockheed Air Terminal Inc.*, 411 U.S. 624, 639 (1973).
- “The Federal Aviation Act requires a delicate balance between safety and efficiency, and the protection of persons on the ground ... The interdependence of these factors requires a uniform and exclusive system of federal regulation if the congressional objectives underlying the Federal Aviation Act are to be fulfilled.” *Burbank* at 638-639.
- “The paramount substantive concerns of Congress [in enacting the FAA Act] were to regulate federally all aspects of air safety ... and, once aircraft were in ‘flight,’ airspace management....” *Burbank* at 644 (Rehnquist, J. dissenting).

U.S. Courts of Appeals

- “Air traffic must be regulated at the national level. Without uniform equipment specifications, takeoff and landing rules, and safety standards, it would be impossible to operate a national air transportation system.” *Gustafson v. City of Lake Angeles*, 76 F.3d 778, 792-793 (6th Cir. 1996)(Jones, N., concurring).
- “The purpose, history, and language of the FAA [Act] lead us to conclude that Congress intended to have a single, uniform system for regulating aviation safety. The catalytic events leading to the enactment of the FAA [Act] helped generate this intent. The FAA [Act] was drafted in response to a series of fatal air crashes between civil and military aircraft operating under separate flight rules In discussing the impetus for the FAA [Act], the Supreme Court has also noted that regulating the aviation industry requires a delicate balance between safety and efficiency. It is precisely because of ‘the interdependence of these factors’ that Congress enacted ‘a uniform and exclusive system of federal regulation.’” *Montalvo v. Spirit Airlines*, 508 F.3d 464, 471 (9th Cir. 2007), citing *City of Burbank v. Lockheed Air Terminal Inc.*, 411 U.S. 624, 638-39 (1973).
- “[W]hen we look to the historical impetus for the FAA, its legislative history, and the language of the [FAA] Act, it is clear that Congress intended to invest the Administrator of the Federal Aviation Administration with the authority to enact exclusive air safety standards. Moreover, the Administrator has chosen to exercise this authority by issuing such pervasive regulations that we can infer a preemptive intent to displace all state law on the subject of air safety.” *Montalvo* at 472.
- “We similarly hold that federal law occupies the entire field of aviation safety. Congress’ intent to displace state law is implicit in the pervasiveness of the federal regulations, the dominance of the federal interest in this area, and the legislative goal of establishing a single, uniform system of control over air safety. This holding is fully consistent with our decision in *Skysign International, Inc. v. Honolulu*, 276 F.3d 1109 (9th Cir. 2002), where we considered whether federal law preempted state regulation of aerial advertising that was distracting and potentially dangerous to persons on the ground. In upholding the state regulations, we held that federal law has not ‘preempt[ed] altogether any state regulation purporting to reach into the navigable airspace.’ *Skysign* at 1116. While Congress may not have acted to occupy exclusively all of air commerce, it has clearly indicated its intent to be the sole regulator of aviation safety. The FAA, together with federal air safety regulations, establish complete and thorough safety standards for interstate and international air transportation that are not subject to supplementation by, or variation among, states.” *Montalvo* at 473-474.
- “[W]e remark the Supreme Court’s reasoning regarding the need for uniformity [concerning] the regulation of aviation noise, see *City of Burbank v. Lockheed Air Terminal*, 411 U.S. 624 (1973), and suggest that the same rationale applies here. In *Burbank*, the Court struck down a municipal anti-noise ordinance placing a curfew on jet flights from a regional airport. Citing the ‘pervasive nature of the scheme of federal

regulation,' the majority ruled that aircraft noise was wholly subject to federal hegemony, thereby preempting state or local enactments in the field. In our view, the pervasiveness of the federal web is as apparent in the matter of pilot qualification as in the matter of aircraft noise. If we upheld the Rhode Island statute as applied to airline pilots, 'and a significant number of [states] followed suit, it is obvious that fractionalized control ... would severely limit the flexibility of the F.A.A.' [citing *Burbank*] Moreover, a patchwork of state laws in this airspace, some in conflict with each other, would create a crazyquilt effect ... The regulation of interstate flight-and flyers-must of necessity be monolithic. Its very nature permits no other conclusion. In the area of pilot fitness as in the area of aviation noise, the [FAA] Act as we read it 'leave[s] no room for ... local controls.' [citing *Burbank*]. *French v. Pan Am Express, Inc.*, 869 F.2d 1, 6 (1st Cir. 1989).

Jackie Mosher

From: Corey Woodby on behalf of Senate Majority Committee Clerks
Sent: Thursday, February 4, 2016 9:14 AM
To: Jackie Mosher
Subject: FW: Addition: SB 432 & SB 433 Written testimony for committee hearing this week

FYI

Corey Woodby
Senate Majority Committee Clerk
517-373-1721

From: Eagle-Eye Drone Service [mailto:eagleeyedroneservice@gmail.com]
Sent: Wednesday, February 3, 2016 9:33 PM
To: Greg MacMaster <eagleeyedroneservice@gmail.com>
Cc: Senate Majority Committee Clerks <OfcSMCC@senate.michigan.gov>; Tom Casperson <tcasperson@senate.michigan.gov>; Ken Horn <KHorn@senate.michigan.gov>; Phil Pavlov <PPavlov@senate.michigan.gov>; Jim Marleau <JMarleau@senate.michigan.gov>; The Office of Senator Hopgood <SenHHopgood@senate.michigan.gov>
Subject: Addition: SB 432 & SB 433 Written testimony for committee hearing this week

Please add to testimony:

Myth: The FAA doesn't control airspace below 400 feet

Fact—The FAA is responsible for air safety from the ground up. Under 49 U.S.C. § 40103(b)(2), the FAA has broad authority to prescribe regulations to protect individuals and property on the ground and to prevent collisions between aircraft, between aircraft and land or water vehicles, and between aircraft and airborne objects. Consistent with its authority, the FAA presently has regulations that apply to the operation of all aircraft, whether manned or unmanned, and irrespective of the altitude at which the aircraft is operating. For example, 14 C.F.R. § 91.13 prohibits any person from operating an aircraft in a careless or reckless manner so as to endanger the life or property of another.

We hope this information is helpful and should you have any questions, please don't hesitate to reach out to us.

Thanks,

Greg MacMaster - Pilot
Kim MacMaster - Commercial Production

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231-360-0636

On Feb 1, 2016, at 3:37 PM, Eagle-Eye Drone Service <eagleeyedroneservice@gmail.com> wrote:

To:

Committee Clerk
Michigan Senate Transportation Committee
UAV Testimony

Please include these documents for distribution to all committee members
and include as written testimony this week. SB 432 & SB 433

Attached:

Letter from Aeries Flight LLC
Letter from Eagle Eye Drone Service
PDF UAS Fact Sheet

<Michigan Transportation Committee UAV Drones.pdf>

<Aerius Ltr to Casperson re Drone Legislation.docx>

<UAS_Fact_Sheet_Final.pdf>

Thank you,

Greg MacMaster

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